

A, D = alkyl, aryl or H  
 B = *tert*-butyl (tBMA) and dimethylaminoethyl (DMAEMA)  
 C = alkyl, aryl or any hydrophobic moieties  
 E = H (MAA) or (trimethylammonium)ethyl (TMAEMA)  
 F = alkyl, aryl or any hydrophobic moieties

Figure 1  
 The synthetic route for the preparation of block copolymer,  
 possessing a hydrophobized polyelectrolyte block.

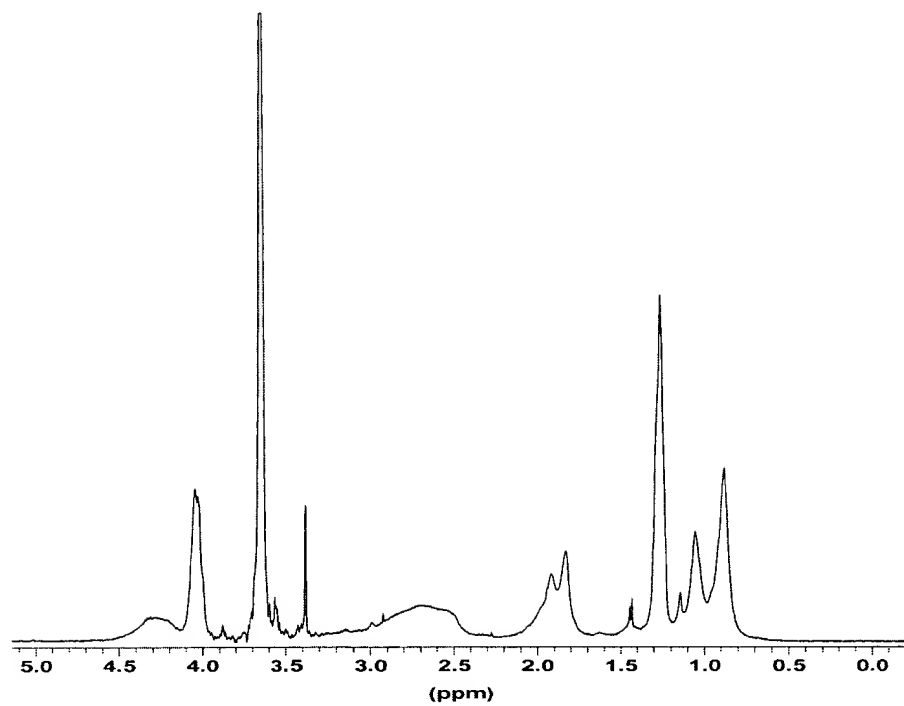


Figure 2

$^1\text{H}$  NMR spectrum of PEG-*b*-P(DMAEMA<sub>70</sub>-co-EMA<sub>30</sub>) in  $\text{CDCl}_3$ .

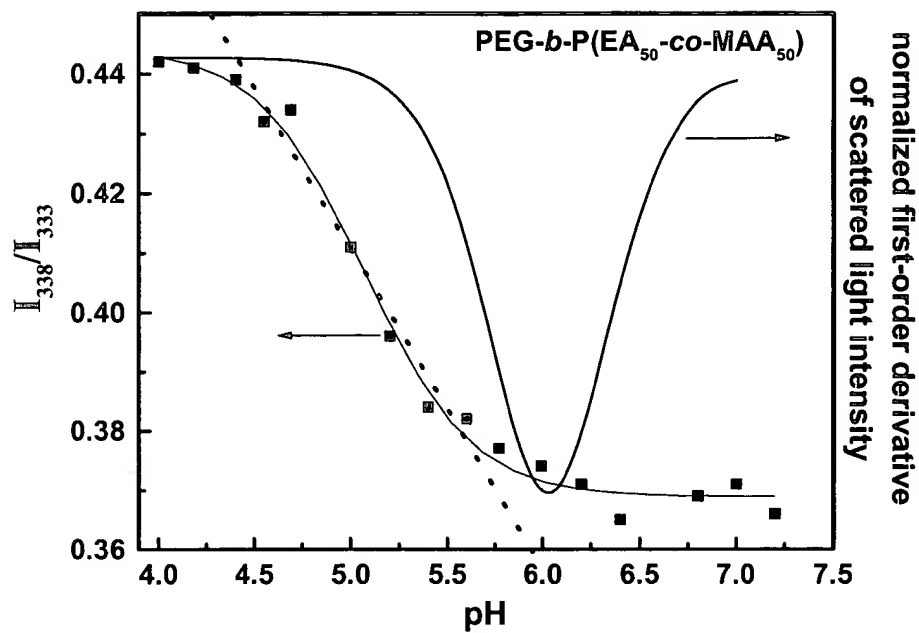


Figure 3

The variation in light scattering and pyrene fluorescence  $I_{338}/I_{333}$  ratio of a PEG-*b*-P(EA<sub>50</sub>-co-MAA<sub>50</sub>) aqueous solution as a function of pH.

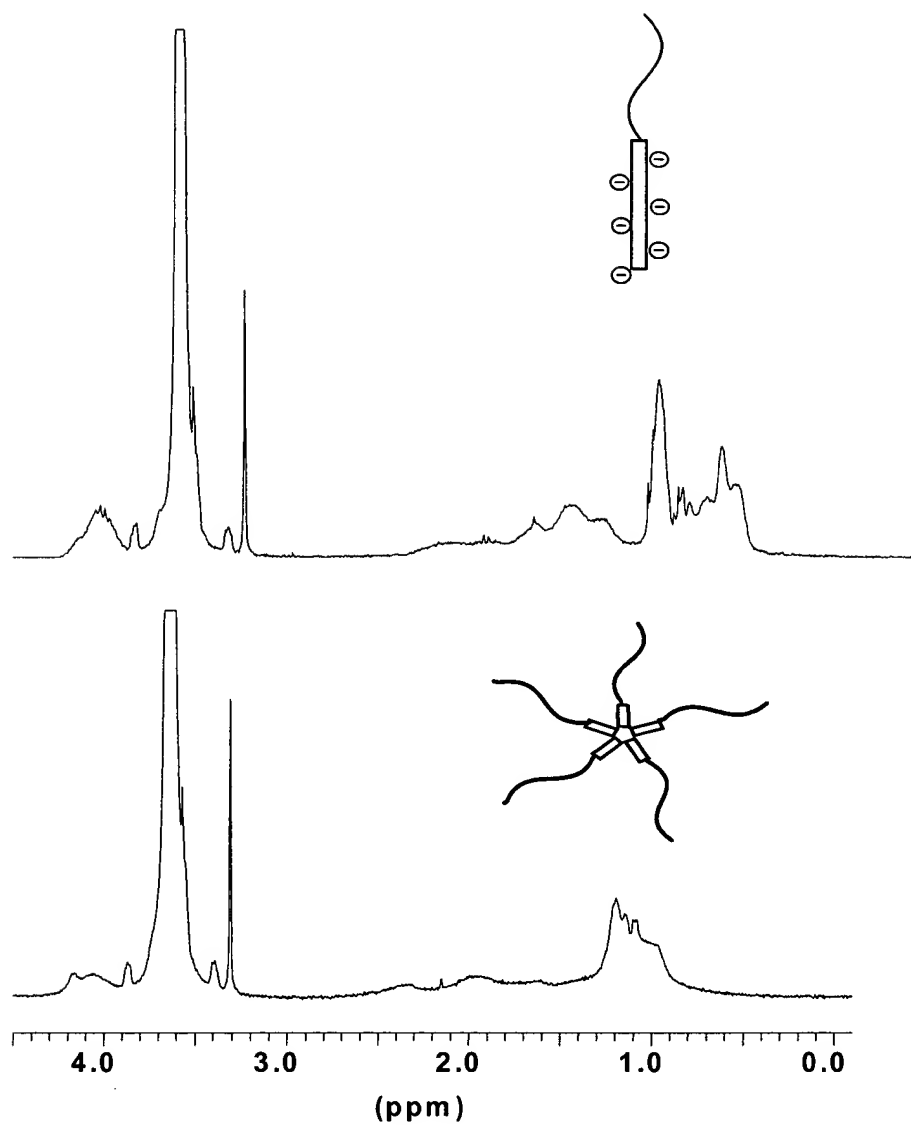


Figure 4  
 $^1\text{H}$  NMR spectrum of PEG-*b*-P(EA<sub>50</sub>-co-MAA<sub>50</sub>) in D<sub>2</sub>O at pH 10 (A)  
 and at pH 3 (B).